

GenCore version 5.1.4_p5_4578
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OM protein - protein search, using sw model

Run on: March 17, 2003, 07:20:40 ; Search time 12.1756 Seconds
(without alignments)
228.975 Million cell updates/sec

Title: US-09-787-082-6

Perfect score: 173

Sequence: 1 CKGKAKSRLMYDCTGSCRGKCTRNG 29

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 283224 seqs, 96134422 residues

Total number of hits satisfying chosen parameters: 283224

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

PIR_73: *
1: pir1: *
2: pir2: *
3: pir3: *
4: pir4: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	151	87.3	25	2 JH0700	omega-conotoxin MV
2	120	69.4	25	2 JH0701	omega-conotoxin MV
3	112.5	65.0	29	2 JH0699	omega-conotoxin MV
4	104	60.1	29	2 A58537	omega-conotoxin SV
5	97.5	56.4	26	2 C43379	omega-conotoxin GV
6	75.5	43.6	29	2 A43620	omega-conotoxin GV
7	75.5	43.6	29	2 B43620	omega-conotoxin GV
8	64	37.0	72	2 S39417	metallothionein 10
9	60.5	35.0	66	2 S58086	metallothionein 3
10	60.5	35.0	68	2 A46034	metallothionein 3
11	60.5	35.0	68	2 I67866	growth inhibitory
12	59	34.1	72	2 S39416	metallothionein 10
13	59	34.1	686	2 T25987	hypothetical prote
14	58	33.5	27	2 S19619	delta-conotoxin Tx
15	58	33.5	78	2 S12513	delta-conotoxin Tx
16	57.5	33.2	751	2 F87789	protein C34G6.2 [i
17	57.5	33.2	1369	2 S70713	protein-tyrosine k
18	57	32.9	24	2 B43379	omega-conotoxin SV
19	57	32.9	72	2 S39419	metallothionein 10
20	56.5	32.7	73	1 NTK6G	omega-conotoxin GV
21	56.5	32.7	610	2 JC7530	vascular apoptosis
22	56	32.4	318	2 T05569	hypothetical prote
23	56	32.4	2664	2 T28626	variant-specific s
24	55	31.8	60	1 SMH01A	metallothionein 1A
25	55	31.8	65	2 A38739	metallothionein 1
26	55	31.8	68	2 B46034	metallothionein 3
27	55	31.8	68	2 S43392	metallothionein 3
28	55	31.8	68	2 JC6521	metallothionein II
29	55	31.8	615	1 KFHU12	coagulation factor

ALIGNMENTS

RESULT 1

JH0700

omega-conotoxin MVIIA [validated] - cone shell (Conus magus)

C;Species: Conus magus (magus cone)

C;Date: 17-Apr-1993 #sequence.revision 17-Apr-1993 #text_change 15-Sep-2000

C;Accession: JH0700; C60133; A34115

R;Hillyard, D.R.; Monje, V.D.; Mintz, I.M.; Bean, B.P.; Nadasdi, L.; Ramachandran, J

Neuron 9, 69-77, 1992

A;Title: A new conus peptide ligand for mammalian presynaptic Ca2+ channels.

A;Reference number: JH0699; MUID:92337922; PMID:1352986

A;Accession: JH0700

A;Status: nucleic acid sequence not shown

A;Molecule type: mRNA

A;Residues: 1-25 <Hil>

R;Olivera, B.M.; Gray, W.R.; Zeikus, R.; McIntosh, J.M.; Varga, J.; Rivier, J.; de S

Science 230, 1338-1343, 1985

A;Title: Peptide neurotoxins from fish-hunting cone snails.

A;Reference number: A43620; MUID:86070213; PMID:4071055

A;Accession: C60133

A;Molecule type: protein

A;Residues: 1-25 <Oli>

R;Olivera, B.M.; Cruz, L.J.; de Santos, V.; LeCheminant, G.W.; Griffin, D.; Zeikus, J

Biochemistry 26, 2086-2090, 1987

A;Title: Neuronal calcium channel antagonists. Discrimination between calcium channel

A;Reference number: A34115; MUID:87299637; PMID:2441741

A;Contents: annotation

R;Nielsen, K.J.; Thomas, L.; Lewis, R.J.; Alewood, P.F.; Craik, D.J.

submitted to the Brookhaven Protein Data Bank, August 1996

A;Reference number: A67648; PDB:1MWI

A;Contents: annotation; conformation by (1)H-NMR, residues 1-25

R;Nielsen, K.J.; Thomas, L.; Lewis, R.J.; Alewood, P.F.; Craik, D.J.

J. Mol. Biol. 263, 297-310, 1996

A;Title: A consensus structure for omega-conotoxins with different selectivities for

A;Reference number: A58619; MUID:97070382; PMID:8913308

A;Contents: annotation; conformation by (1)H-NMR

R;Kohn, T.; Kim, J.I.; Kobayashi, K.; Kadera, Y.; Maeda, T.; Sato, K.

submitted to the Brookhaven Protein Data Bank, April 1995

A;Reference number: A66296; PDB:1OMG

A;Contents: annotation; conformation by (1)H-NMR, residues 1-25

R;Kohn, T.; Kim, J.I.; Kobayashi, K.; Kadera, Y.; Maeda, T.; Sato, K.

Biochemistry 34, 10256-10265, 1995

A;Title: Three-dimensional structure in solution of the calcium channel blocker omeg

A;Reference number: A58627; MUID:95367555; PMID:7640281

A;Contents: annotation; conformation by (1)H-NMR

C;Superfamily: Omega-conotoxin

C;Keywords: acetylcholine release inhibition; amidated carboxyl end; calcium channel

F;1-16,8-20,15-25/Disulfide bonds; #status predicted

F;25/Modified site: amidated carboxyl end (Cys) #status experimental

Query Match

Best Local Similarity 87.3%; Score 151; DB 2: Length 25;

Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

R; Mackay, E.A.; Overnell, J.; Dunbar, B.; Davidson, I.; Hunziker, P.E.; Kaegi, J.H.R.; F

A:Title: Mollusc-specific toxins from the venom of Conus textile neovicarius.
A:Reference number: S19553; M0ID:92104183; PMID:1761058
A:Accession: S19553
A:Molecule type: protein
A:Residues: 52-78 <FAI>
C:Superfamily: omega-conotoxin
C:Keywords: neurotoxin; sodium channel inhibitor; venom
F:1-22/Domain: signal sequence #status predicted <SIG>
F:23-51/Domain: propeptide #status predicted <PRO>
F:52-78/Product: delta-conotoxin TxVIA #status experimental <MAT>
F:53-68,60-72,67-77/Disulfide bonds: #status predicted

Query Match 33.5%; Score 58; DB 2; Length 78;
Best Local Similarity 42.3%; Pred. No. 6.8;
Matches 11; Conservative 2; Mismatches 13; Indels 0; Gaps 0;

QY 1 CKGKGAKCSRLMYDCCTGCRSGKCT 26
|| | | | | | | | | | | | | | | | | | | | |
Db 53 CKSGEMCNLLDQNCDDGYCIVLVCT 78

Search completed: March 17, 2003, 07:27:25
Job time : 12.1756 secs

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